Art. IX.-Studies in Australian Spiders, No. 2.

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## Introduction.

This paper deals with seven small new spiders, which have been collected by Mr. C. Oke, of St. Kilda. Six new genera have been erected, and the genus Tetrablemma is now added to the Australian list. Some of these new genera have been placed tentatively in cxisting sub-families, but the examination of further new specimens may neccssitate their removal.

Savory's statement ${ }^{(3)}$ that the Amazon spider Ogulnius obtectus, 1.0 mm . in length, is the smallest known, has been refuted by the discovery of Microlinypheus bryophilus, gen. et sp. nov., which measures male 0.6 mm ., female 0.8 mm .

The following details are worthy of notice:-Plectochetos longissimut, gen. et sp. nov., has an extraordinary male tarsal organ; Eterosonycha alpina, gen. et sp. nov., has different claws on the fourth tarsi from the other tarsi; Perissopmeros castaneous, gen. et sp. nov., reveals uncommon coxac: $M$. bryophilus has one joint absent from the pedipalp; Tetrablemma okei, sp. nov., has four eyes and illustrates the primitive condition of segmentation. T. okei is the third record of the genus; it was originally described from Ceylon in $1873^{(1)}$ (not 1870 as in Simon's ${ }^{(4)}$ and Petrunkevitch's ${ }^{(2)}$ works).
Unfortunately the biology of these seven spiders is unknown.
The type of Alaxchelicera ordinaria, gen. et sp. nov., is mounted in balsam on a glass slip; the remainder have been hermetically sealed in glass tubes. All have been presented to the National Museum, Melbourne.

## Family LINYPHIIDAE.

## Sub-Family LOPHOCARENINAE. <br> Genus Microlinypheus, gen. nov

Eyes eight, heterogeneous, in two rows of four, both lines recurved. Pedipalps, patella wanting. Chelicera, anterior margins furnished with strong spines. Abdomen, dorsal surface completely covered with scuta; spinnerets surrounded with a chitinized circular wall.

Genotype. M. bryophilus.
Microlinypheus bryophilus, gen. et sp. nov.
(Text-fig. 1, Nos. 1-7.)

## Female.

Total length of specimen preserved in $60 \%$ alcohol 0.8 mm . Length of cephalothorax to overhang of abdomen 0.3 mm . Breadth of cephalothorax 0.28 mm . Length of abdomen 0.5 mm . Breadth of abdomen 0.48 mm . Length of chelicera 0.13 mm . Breadth of chelicera 0.09 mm . Length of claw of chelicera 0.08 mm . Width of ocular area 0.16 mm .

Cephalothorax.-Longer than broad, strongly convex, broadly curved in front and gradually widening to the broadest part, which is situated at the position of the third pair of legs. Frontal view of head pyriform ; ocular area well forward; from frontal view the eyes are placed centrally. Clypeus vertical, twice as broad as high. Thorax sloping abruptly down from the head to the pedicel. The cervical groove is well defined, radical furrows are present. On the head a central longitudinal furrow is present, this is bisected by a lateral groove.

Eyes.-Eight, heterogeneous, A.M.E. alone diurnal, all circular and hyaline, evenly spaced in two rows of four, both lines recurved, anterior line more strongly so; when viewed from the front they curve downwards. P.M.E. largest. A.M,E. 0.02 mm . F.M.E. 0.027 mm . A.L.E. 0.02 mm . P.L.E. 0.02 mm . Spacing of posterior eyes 0.02 mm . Anterior eycs 0.01 mm .

Chelicera.-Small, smooth, marginal furrow not dentated but furnished with a few strong spines; boss and stridulating ridges apparently wanting. Claw of chelicera small.

Labium.-Free, broader than long.
Endites.-Broader than long, inner margins tapering to a blunted point. The serrula has seventeen teeth.

Stcrnum.-Slightly broader than long, somewhat cordate shaped.

Explanation of Fig. 1.
1-7.-Microlinypheus bryophilus, sp, nov. 1, Dorsal view of male. 2, Frontal view of male. 3, Ventral view of female. 4, Pedipalp of female. 5, Eyes of male. 6, Tarsus showing claws. 7, Profile of female.
8-14.-Platycephala punctata, sp. nov. 8, Dorsal view. 9, Profile of cephalothorax. 10, Sternum. 11, Chelicera. 12, Frontal view of cephalothorax. 13, Epigynum. 14, Tarsus showing claws.

15-20.-Plectochetos longissimus, sp. nov. 15, Frontal view of cephalothorax. 16, Sternum. 17. Tarsal bulb of male pedipalp, front view. 18, same, side view. 19, Tarsus showing claws. 20 , Dorsal view of cephalothorax showing one pedipalp.


Pedipalps.-Short, five jointed; the patella is missing. The tarsus has no claw but a few strong hairs are present.

Legs.-Small and nimble, trichobothria and scopulae missing. sparsely clothed with hairs: on the tarsi the hairs are thicker. Three claws, smooth, not dentated, but where the teeth are generally situated there are a few fine serrations present. Formula, $\overline{134}$.2.

| Leg. | Coxa. | Trochanter. | Femim. | Patella. | Tibia. | Metatarsus. | Tarsus. | Total <br> Lengin. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | -08 | - 04 | - 20 | -08 | -12 | -08 | -12 | -72 |
| 2 | -08 | -0.4 | -16 | -08 | -12 | -08 | -14 | - 70 |
| 3 | -08 | -04 | -22 | -06 | -12 | -08 | -12 | -72 |
| 4 | -06 | - 04 | -22 | -04 | -16 | -10 | -10 | $\cdot 72$ |
| Pedipalp | -01 | -03 | -047 | . . | -03 |  | -045 | -162 |

Abdomen.-Globular. Dorsal surface completely covered with a faintly granulated scuta. Ventral scuta smaller, the posterior edge has two onter curves connected in the centre by a straight line. Dorsal and ventral scutae connected by a soft integument, visible only when the abdomen is swollen.

Epigynum.-A pair of circular openings are situated near the posterior edge of the ventral scuta.

Spinnerets.-Small compact group, completely surrounded by a chitinized circular wall. Fore spinnerets largest, hind shorter, medians not visible.

Colulus.-Wanting.
Colour in alcohol.-Body rich chestnut-brown, legs slightly paler.
Male.

This corresponds to the female in nearly all the detail other than the reproductive organs. Total length 0.6 mm . The other measurements have the same smaller relation to the female.

Epigynum.-Simple slit-like.
Pedipalps.-Short; tarsal joint globular, small, with simple detail in the form of a small spiral.

Type locality.-Lorne, Victoria. January, 1928. Collected from moss by Mr. C. Oke. The moss was gathered by Mr. C. J. Gabriel.

## Genus Plectochetos, gen. nov.

Eyes eight, heterogeneous, in two rows of four, both lines recurved. Clypeus steep and high. Tarsi three clawed, smooth. inferior claw one large tooth. Abdomen covered with a dorsal scuta; spinnerets surrounded with a chitinized circular wall. Tarsi of male pedipalp very large and globular, ejaculatory duct extremely long and spirally wound around the outer edge.

Genotype. P. longissimus.
Plectochetos longissimus, gen. et sp. nov.
(Text-fig. 1, Nos. 15-20.)

## Male.

Total length 0.94 mm . Length of cephalothorax 0.4 mm . Breadth of cephalothorax 0.36 mm . Length of abdomen 0.54 mm . Breadth of abdomen 0.6 mm . Height of cephalothorax (front view) 0.28 mm . Length of chelicera 0.12 mm . Width of ocular arca 0.24 mm . Diameter of tarsal bulb on pedipalp 0.26 mm .

Cephalothorax.-Longer than broad; oval, truncated at rear. Frontal view of cephalothorax, sides nearly straight to cyes, then curving to vertex. Oscular area high. Clypeus steep, vertical, wider than high. Head strongly convex, situated well above the thorax and sloping down abruptly to the cervical groove. Thorax much lower, lightly convex.

Eyes.-Eight, evenly spread in two rows of four, both lines recurved, hyaline, glistening, surrounded with dark pigment. taterals largest, slightly oval. Diameter of eyes, A.M.E. . 02 mm . P.M.E. 0.04 mm . A.L.E. 0.05 mm . P.L.E. 0.05 mm . Separation of eyes P.M.E. 0.04 mm , A.M.E. 0.015 mm , P.M.E. and P.L.E. 0.03 mm . A.L.E. and P.L.E. 0.03 mm . A.L.E. and P.L.E. 0.01 mm .

Chelicera.-Small, smooth, superior margin furnished with a few strong spines. Claw of chelicera, medium, curved, and evenly tapered.

Labium.-Small, broader than long.
Endites.-Small, broader than long, tapering in front of the labium.

Sternum.-Longer than broad; front broadest, tapering a little to the posterior edge, which is wide and recurved.

Pedipalps.-Short, ending with an extremely large globular bulb. The cymbium is semi-elliptical; the upper two-thirds of the bulb is spirally grooved for the reception of the ejaculatory duct. This duct is exceptionally long and consists of about twenty turns, attached at the centre and entirely free clsewhere. This coiled duct can be pulled out in the manner of a spring, and when released it snaps back into its correct position on the grooved conductor. The duct is translucid, revealing a contral channel throughout its entire length.

Legs.-Short and nimble. Three claws are present; superior claws smooth, long and evenly tapered; inferior claw short, thick and dentated with one large tooth. Formula, 4, 3, 1, 2.


Abdomen.-Obovate, nearly circular. Spinnerets visible from above. Dorsal scuta present. Ventral epigastric plate with lateral edges curved, posterior edge slightly recurved with blunted projections each end.

Epigynum.-Simple, no detail visible.
Spinnercts.-Very short, surrounded by a chitinized circular wall.

Colulus.-Wanting.
Colour in alcohol.-Cephatothorax yellow-brown, with darker markings especially at the ocular area. Legs, chelicera, yellowbrown. Pedipalps ycłlow-brown; ejaculatory duct very dark brown. Abdomen, dorsal scuta yellow-brown, edges darker. Ventral epigastric plate rich brown; soft connecting integument ornamented with dark dotted ridges or bands.

Type locality.-Mt. Donna Buang, 4,080 feet, near Warburton, Victoria, Febrtary, 1931. Under $\log$ s and similar places. (C. Oke.)

The female is unknown.

## Sub-Family ERIGONINAE.

## Genus Alaxchelicera, gen. nov.

Eyes eight, homogeneous, in two rows of four, both rows recurved. Legs evenly clothed with hairs, scopulae and trichobothria wanting. The paracymbium, also the apophysis of the tibia of the male pedipalp, is wanting. Abdomen soft, scuta wanting.

Genotype. A. ordinaria.
Alaxchelicera ordinaria, gen, et sp. nov.
(Text-fig. 2, Nos. 14-17.)

## Female.

Total length 0.9 mm . Length of cephalothorax to overhang of abdomen, 0.42 mm . Breadth of cephalothorax 0.32 mm . Length of abdomen 0.40 mm . Breadth of abdomen 0.40 mm .

Cephalothorax.-Longer than broad, obovate, anterior portion narrowest. Head strongly convexed, central furrow present. Ocular area well forward. Clypeus broad, steep. Thoracic and cervical grooves scarcely visible. Thorax lightly convexed.

Eyes.-Eight, homogeneous, hyaline, in two recurved rows of four. Posterior row more widely separated than the anterior row. Frontal view, anterior row straight, posterior row curving downwards. Measurements of eyes, A.M.E. 0.022 mm . P.M.E. 0.035 mm . A.L.E. 0.03 mm . P.L.E. 0.035 mm .

Chelicera.-Small, superior margin four teeth; inferior margin three teeth. Claw small and fine.

Labium.-Hidden.
Endites.-Partially hidden, scopulated.
Sternum.-Oval, closely following the lines of the coxae and broadly separating the hind coxae.

Pedipalps.-Hidden.
Legs.-Short, evenly clothed with hairs, bristles or spines on fourth tibia wanting. Three claws, superiors finely dentated, inferior claw smooth. Trichobothria wanting. Formula, $4,2,3,1$.

| Leg. | Coxa. | Trochanter. | Eemur. | Patella. | Tibia. | Metatarsus. | Tarsus. | Total Length |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | -12 | -05 | -44 | -14 | - 20 | - J6 | - 20 | $1 \cdot 31$ |
| 2 | -12 | -08 | - 44 | -16 | -36 | - 26 | - 24 | $1 \cdot 66$ |
| 3 | -10 | -08 | -34 | -12 | -40 | -20 | -18 | $1 \cdot 42$ |
| 4 | -12 | -10 | -42 | -14 | - 42 | -32 | - 28 | 1-80 |
| Pedipalp | -06 | -05 | -16 | -08 | - 06 |  | -08 | - 49 |

Abdomen,-Oval. Epigastric plate with three small apertures near the epigynum, posterior edge of the plate recurved with short blunt projections at each end ; the lateral edges curve out broadly to the anterior portion of the abdomen.

Epigynum.-Simple slit-like.
Spinnerets.-Short, small compact group.
Colulus.-Very small, possibly wanting.
Colour in alcohol.-Cephalothorax and appendages brown; abdomen dark grey with lighter markings.
Male.

This corresponds to the female in nearly all the detail other than the following. Measurements approximately the same.

Chelicera.-Very fine stridulatory ridges. Female not examined for the same.


Pedipalps.-Short. Tarsal bulls small when contracted, when extended the following detail can be observed:-The terminal apophysis, also the three divisions of the bulb and its various detail, is visible. The apophysis of the tibia and the paracymbium are wanting. On the inside edge of the femur corresponding to the position of the stridulatory ridges of the chelicera a small blade or ridge can be noticed.

Type locality.-Lorne, Victoria. January, 1928. Collected from moss by Mr. C. Oke. The moss was gathered by Mr. C. 1. Gabriel.

Family OONOPIDAE. Sub-Family GAMASOMORPHINAE.
Genus Tetrablemma O. P. Cambridge.
(Proc. Zool. Soc. London, 1873, p. 114.)
Tetrablemma okei, sp. nov.
(Text-fig. 2, Nos. 1-6.) Female.
Total length, 1.27 mm . Length of cephalothorax, 0.5 mm . Length of cephalothorax to overhang of abdomen, 0.4 mm . Breadth of cephalothorax, 0.42 mm . Length of abdomen, 0.87 mm . Breadth of abdomen, 0.62 mm . Length of chelicera, 0.18 mm . Breadth of chelicera, 0.1 mm . Length of claw of chelicera, 0.07 mm .

Cephalothorax.-Longer than broad, convex, anterior edge slightly hollowed in centre; lateral edges curved and wider at rear; cervical and thoracic grooves hardly visible. Ocular area compact, central. Thorax sloping abruptly to rear. Carapace faintly marked with fine granulations and clothed with a few coarse hairs.

Explanation of Fig. 2.
1-6.-Tetrablemma okei, sp. nov. 1. Ventral view. 2, Profile. 3, Posterior view of abdomen. 4, Dorsal view of cephalothorax. 5, Frontal view of cephalothorax. 6, Tarsus showing claws.

7-13.-Eterosonycha alpina, sp. nov. 7, Sternum of female. 8, Claws of fourth tarsus. 9, Claws of first. second or third tarsi. 10, Eyes of female viewed from above. 11, Tarsul bulb of male pedipalp, dorsal view. 12, same ventral view. 13, same frontal view.

14-17.-Alarchelicera ordinaria, sp. nov. 14, Tarsal bulb of male pedipalp. 15, Frontal view of cephalothorax. 16, Eyes of female viewed from above. 17, Tarsus showing claws.

18-23.-Perissopmeros castaneons, sp. nov. 18, Tarsal bulb of male pedipalp, frout view. 19. Frontal view of eyes. 20. Dorsal view. 21, Tarsus showing claws. 22, Ventral view of abdomen. 23, Ventral view of cephalothorax.

Eyes-Four, in two straight rows evenly situated from anterior and lateral edges of the carapace. Anterior eyes largest, sub-contiguous; posterior eyes separated by a distance of 0.04 mm. All elliptical, hyaline. A.E. pale greenish-pearl; P.E. clear. A.E. 0.05 mm . P.E. 0.45 mm . All eyes are surrounded and connected by dark pigment.

Chelicera.-Small, claw feeble.
Labium.-Free, broader than long, scopulated.
Endites.-Converging, longer than broad, scopulated, straight at apex, broad and curved at base.

Sternum.-Convex, longer than broad, separating the posterior coxae: main area slightly raised and granulated. The coxa of each leg is completely surrounded by extensions of the sternum; the outer edge of the sternum meets the lower edge of the dorsal carapace in a faint straight line.

Pedipalps.-Small and feeble, clothed with a few coarse hairs; claw missing.

Legs.-Moderate, clothed with a few coarse hairs; trichobotharia and scopulae missing. Three claws, superior pair dentated with long fine teeth; inferior claw smaller and similarly dentated. Formula, 4, 1, $2,3$.

| Leg. | Coxa. | Trochanter. | Femur. | Patella. | Tibia. | Metatarsus. | Tarsus. | $\begin{aligned} & \text { Total } \\ & \text { Length. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\cdot 13$ | - 05 | - 27 | - 10 | - 26 | - 20 | - 20 | 1.20 |
| 2 | - 10 | -05 | -20 | -08 | - 24 | -16 | - 18 | $1 \cdot 01$ |
| 3 | -09 | - 05 | -12 | - 09 | - 20 | -16 | -18 | -89 |
| 4 | -12 | - 05 | - 24 | -11 | - 32 | - 20 | - 20 | 1-24 |
| Pedipalp | - 04 | -04 | -10 | - 08 | -06 | . . | -06 | - 38 |

Abdomen.-Obovate, overhanging the cephalothorax. Dorsal chitinous scuta present. Lateral and posterior edges steep. Three longitudinal and three posterior transverse bands divide and segment the steep edges of the abdomen.

Anterior ventral scuta meets the epigastric furrow, two dark patches are situated each side of the pedicel. The posterior edge of this ventral shield curves past the spiracles and inwards to the epigynum; a slaped transverse band is connected here. At the rear of this band a curved transverse plate is located, and further back is a chitinous conical wall, flattened anteriorly; this wall encircles the spinnerets.

Epigynum.-Simple slit-like; the nearby markings have no relation to the structure of this organ.

Spinnerets.-Small and short, fore largest, hind smallest, medians possibly wanting.

Colulus.-Wanting.

Colour in alcohol.-Around the eyes piceus, elsewhere light chestnut-brown.

Type locality.-Bairnsdale, Victoria. June, 1930. Under the bark of a eucalypt. (C. Oke.)

The male is unknown.

Family ZODARIIDAE.
Sub-Family ZODARIINAE.
Genus Platycephala, gen. nov.
Eyes.-Eight, in two rows, anterior row recurved, posterior row slightly procurved nearly straight. Scopulae wanting on tarsi; claws three, dentated. Cephalothorax broad in front, lateral edges parallel. Spinnerets rosette shaped.

Genotype. $P$. punctata.
Platycephala functata, gen. et sp . nov.
(Text-fig. 1, Nos. 8-14.)

## Female.

Total length 3.2 mm . Length of cephalothorax 1.2 mm . Breadth of cephalothorax 1.0 mm . Length of abdomen 2.0 mm . Breadth of abdomen 2.2 mm . Length of chelicera 0.44 mm . Breadth of chelicera 0.40 mm . Length of claw of chelicera 0.2 mm . Width of ocular area 0.96 mm .

Cephalothorax.-Longer than broad, broadly convex, front edge square blunted at corners; lateral edges straight, parallel ; posterior edge semi-spherical. Frontal view somewhat oval with a small projection between the chelicera; head sloping abruptly upwards to the centre of the cephalothorax. Cervical groove just visible at the lateral edges. Ocular area well spread. Carapace punctuated, punctures evenly spread in an irregular pattern, posterior portion of thorax smooth. Thorax sloping downwards abruptly to rear. Epimera, a narrow tapering band at rear only. Clypeus broad, lower edge fringed with a row of hairs.

Eyes.-Eight, well separated in two rows of four. Antcrior row recurved, posterior row slightly procurved nearly straight. All hyaline and encircled with heavy black pigment. P.M.E.. largest. Laterals sub-contiguous. Diameter of eyes, A.M.E. 0.05 mm . P.M.E. 0.08 mm . A.L.E. 0.04 mm . P.L.E. 0.04 mm . Separation of eyes, A.M.E. 0.09 mm . P.M.E. 0.32 mm . Spacing between the eyes, P.M.E. and P.L.E. 0.39 mm . A.M.E. and A.L.E. $0.34 \mathrm{~mm} . \quad$ P.M.E. and A.M.E. 0.24 mm .
`Chelicera-Small, faint boss present, upper portion punctated, lower inner portion clothed with a few scattered hairs. Inferior margin two large and about five small teeth, superior margin hairs. Claw medium.

Labium.-Four times broader than long, well curved.
Endites.-Proader than long, inner and portion of anterior edge scopulated. Serrulae present.

Sternum.-Longer than broad, clothed with scattered adpressed hairs.

Pedipalps.-Short, sparsely clothed with hairs, tarsi more thickly so, ending with a pectinated claw.

Legs.-Medium. Tarsi three clawed, superiors strongly dentated, inferior claw nearly smooth; clothing as on pedipalps. Formula 1, 2, 4, 3.

| Leg. | Coxa. | Trochanter. | Fenur. | Patella | Tibia. | Metalarsus. | 'Tarsu | $\begin{aligned} & \text { Total } \\ & \text { Length } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | - 42 | -14 | - 60 | -32 | -36 | - 34 | -28 | $2 \cdot 46$ |
| 2 | - 28 | -10 | -60 | -32 | - 36 | -30 | - 32 | $2 \cdot 28$ |
| 3 | -18 | -06 | -40 | -12 | -42 | -12 | - 20 | $1 \cdot 50$ |
| 4 | $\cdots 2$ | -10 | - 70 | - 30 | -45 | -20 | - 24 | 2.19 |
| Pedipalp | -05 | -05 | $\cdot 14$ | -10 | -16 | . | - 20 | - 70 |

Abdomen.-Globular.
Epigynum.-Small, circular, with a pointed projection at rear.
Spinncrets.-Small, rosette shaped. Fore largest, hind smaller, medians very small and hidden.

Colulus.-Vcry small.
Colour in alcohol.-Cephalothorax, chelicera, sternum, legs, pale brown. Eyes encircled with black pigment. Abdomen, dorsal view, granulated pattern in a creamy white with a central pattern showing the underlying integument of a light grectishgrey. Ventral view light greenish-gery.

Type locality.-Mount Macedon district, Victoria. April, 1929. (C. Oke.)

The male is unknown.

## Genus Eterosonycha, gen. nov.

Eyes.-Eight, homogeneous, in two rows; anterior row recurved, posterior row procurved nearly straight. Anterior medians small and sub-contiguous, laterals similar. Tarsi, scopulae wanting ; claws three, smooth; fourth tarsus only, claws finely dentated.

Genotype. E. alpina.
Eterosonycha alpina, gen. et sp. nov.
(Text-fig. 2, Nos. 7-13.)
Female.
Total length 1.14 mm . Length of cephalothorax 0.52 mm . Length of cephalothorax to overhang of abdomen 0.46 mm . Breadth of cephalothorax 0.36 mm . Length of abdomen 0.68 mm . Breadth of abdomen 0.58 mm .

Cephalothorax.-Elliptical, lateral edges slightly constricted well forward; cervical groove just visible. Ocular area well spread. Head strongly convexed. Thorax much lower, slightly convexed.

Eyes.-Eight, homogeneotis, in two rows of four; anterior row recurved; posterior row slightly procurved, nearly straight. P.M.E. largest, A.M.E. smallest, A.M.E. 0.03 mm . circular subcontiguous. Laterals 0.035 mm . sub-contiguous slightly elliptical. P.M.E. $0.04 \mathrm{~mm} .+0.03 \mathrm{~mm}$. A.M.E. and laterals surrounded by a dark pigment; all eyes pale greenish-pearl in colour. Separation of eyes, P.M.E. 0.03 mm . P.M.E. and P.L.E. 0.05 mm . A.M.E. and A.L.E. 00.4 mm .

Chelicera.-Small, claw feeble.
Labium,-Immobile, scopulated.
Endites.-Converging, well separated at apex, broad at base; scopulated.

Sternum.-Longer than broad, broadly separating the posterior coxae.

Pedipalps.-Small, tarsi clothed with a few coarse hairs ; claw wanting.

Legs.-Moderate, lightly clothed with hairs, trichobothria and scopulae wanting. Fourth tarsus three claws, set with fine sawlike teeth; other tarsi, three claws sharply hooked and smooth. Formula, 1, 4, 3, 2.

| Leg. | Coxa. | Troshanter. | Femur. | Pa ${ }^{+}$ella. | Tibia, | Metatarsus. | Tarsus. | Total Length. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | -10 | - 04 | - 28 | -08 | - 28 | - 11 | - 20 | 1*09 |
| 2 | - 08 | - 04 | -16 | - 09 | -16 | - 10 | -18 | $0 \cdot 81$ |
| 3 | -08 | - 04 | - 24 | - 10 | - 20 | - 16 | -12 | 0.94 |
| 4 | -08 | - 04 | - 24 | - 11 | -22 | - 12 | -20 | $1 \cdot 01$ |
| Pedipalp | -04 | -02 | -08 | -04 | -05 | . . | - 05 | $0 \cdot 28$ |

[^0]Epigynum.--Simple slit-like.
Spinnerets.-Small rosette shaped.
Colulus.-Wanting.
Colour in alcohol.-Cephalothorax and appendages light rich yellow brown; sternum dark brown; eyes surrounded with black pigment. Abdomen dark-greenish black with a pattern of curved stripes in fawn and brown spots. This pattern is more strongly marked on the ventral view.

## Male.

Measurements and other detail similar to female other than the reproductive organs.

Pedipalps.-Large, bulbous, complex in detail. The ejaculatory duct is not entirely free, but is connected to the bulb for part of its length by a striated translucent tissue.

Type locality.-Mt. Kosciusko, New South Wales. January, 1931. In sphagnum moss. (C. Oke.)

Genus Perissopmeros, gen. nov.
Eyes.-Eight, heterogeneous, in two rows of four, both rows recurved. A.M.E. largest and alone diurnal. Thoracic and cervical grooves present. Dorsal and ventral scutae present. Claws three. Coxae of legs, outer portion swollen, base narrow and straight. Sternum completely surrounds the coxa of each leg. Spinnerets surrounded by a chitinized circular wall.

Genotype. P. castaneous.
Perissopmeros castaneous, gen. et sp. nov.
(Text-fig. 2, Nos. 18-23.)
Male.
Total length 2.84 mm . Length of cephalothorax 1.32 mm . Breadth of cephalothorax 0.8 mm . Length of abdomen 1.32 mm . Breadth of abdomen 0.8 mm . Length of pedicel 0.2 mm .

Cephalothorax.-Longer than broad, convex, oval with an anterior prolongation. Head.-Strongly elevated and projecting forwards. Cervical groove present, but not sharply defined. Thoracic grooves and radical striae present. Thoracic punctations forming the positions of the grooves and striae; lateral edges covered with small aculate processes. Clypeus.-Steep, slightly higher than broad.

Pedicel.-Broad and strong, punctated.
Eyes.-Eight, heterogeneous in two rows of four, both rows recurved. A.M.E. largest and alone diurnal. Laterals contiguous. Diameter of eyes, A.M.E. 0.12 mm1. P.M.E. 0.075 mm . A.L.E. 0.08 mm . P.L.E. 0.08 mm . Separation of eyes, A.M.E. 0.05 mm . P.M.E. 0.10 mm . P.M.E. and P.L.E. 0.06 mm .

Chelicera.-Small, claw small.
Labium.-Small.
Endites.-Vertical curving inwards, lightly scopulated.
Sternum.-Convex, covered with small aculate processes; completely surrounding the coxa of each leg and mceting the dorsal carapace in a straight line.

Pedipalps.-Short, tarsal bulb large, smooth, and fairly simple. Ejaculatory duct about the length of the circumference of the bulb. Cymbium sparsely covered with fine hairs.

Legs.-Long, tarsi three clawed, superiors dentated with long even teeth. Coxae, outer portion bulbus, base narrow and straight ; base of coxae longest on posterior coxae and graduating to shortest on anteriors. Formula 1, 4, 2, 3.

| Leg. |  | xa. | Trochanter. | Femur. | Patella. | Tibia. | Metatarsus. | Tarsus. | Total Length. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Base | Main Portion. |  |  |  |  |  |  |  |
| 1 | - 04 | - 38 | -18 | $1 \cdot 41$ | - 40 | 1-32 | $1 \cdot 00$ | - 64 | 5. 37 |
| 2 | - 06 | - 32 | -16 | 1-20 | - 39 | - 90 | -60 | - 50 | $4 \cdot 13$ |
| 3 | -08 | -26 | -13 | -88 | - 36 | -68 | -68 | - 40 | $3 \cdot 47$ |
| 4 | - 09 | - 30 | -16 | $1 \cdot 32$ | - 28 | $1 \cdot 00$ | -88 | -60 | $4 \cdot 63$ |
| palp |  | 08 | -04 | -33 | -16 | - 08 | . | -40 | 1-09 |

Abdomen globular. Dorsal and ventral scutae, smooth; posterior edgc of ventral scuta rccurved.

Epigynum.-Simple opening situated near the centre of the ventral scuta.

Spinnerets.-Short, rosette shaped, fore pair largest. Encircled with a chitinized circular wall.

Colulus.-Wanting.
Colour in alcohol.-Rich chestnut brown. Integument on abdomen between scutae also joints of pedipalp light yellow. Dark patches at the position of the book-lungs.

Type locality.-Mt. Kosciusko, New South Wales. January, 1931. (C. Oke.)

The female is unknown.

## Bibliography.

1. Cambridee, O. P.-Proc. Zool. Soc., London, 1873, p. 114.
2. Petrunkevitch, A.-System Aranearum. Conn. Acad. Arts and Sci., New Haven, Conn., U.S.A., xxix., p. 88, 1928.
3. Safory, T. H.-The Biology of Spiders. London, 1928, p. 258.
4. Simon, E.-Hist. Nat. des Araignées, I., p. 573, 1894.

[^0]:    Abdomen-Obovate, tapering to the spinnerets, slightly overhanging the cephalothorax; a small epigastric plate is present with raised and curved chitinous pattern centrally placed.

